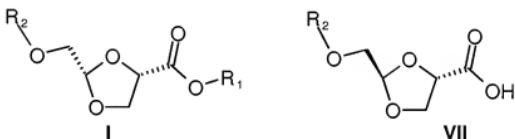


This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (Currently Amended): A process for producing a compound of formula I and a compound of formula VII:



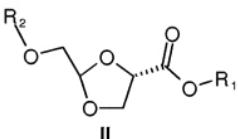
wherein

R₁ is C₁₋₁₂ alkyl, C₂₋₁₂ alkenyl, C₂₋₁₂ alkynyl, C₆₋₁₂ aryl, C₃₋₁₀ heterocycle, C₆₋₁₂ aralkyl or C₃₋₁₀ heteroaralkyl, and

R₂ is CO-C₁₋₆ alkyl, CO-C₆₋₁₂ aryl, CO-C₁₋₆ alkoxy, CO-C₆₋₁₂ aryloxy, or CO-C₆₋₁₂ arylalkyl;

said process comprising:

a) subjecting a compound of formula II:



to an enzymatic diastereomeric resolution in the presence of a suitable amount of Pig Liver Esterase enzyme or Porcine Pancreatic Lipase enzyme, wherein said resolution is conducted in the presence of a solvent selected from water, C₁₋₁₂ alkanol, toluene, acetonitrile, tetrahydrofuran, dimethylformamide, dimethylsulfonamide, N-methylpyrrolidone, isoctane, t-butylmethyl ether, SHIRE-0518

and mixtures thereof; and

b) recovering a compound of formula I and a compound of formula VII.

2. (Original): The process according to claim 1, wherein R₁ is C₁₋₁₂ alkyl.

3. (Previously Presented): The process according to claim 1 wherein R₂ is CO-C₁₋₆ alkyl.

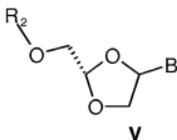
4. (Previously Presented): The process according to claim 1, wherein R₂ is CO-C₆₋₁₂ aryl.

5. (Previously Presented): The process according to claim 1, wherein the enzyme is Pig Liver Esterase.

6. (Previously Presented): The process according to claim 1, wherein the enzyme is Porcine Pancreatic Lipase.

7. (Previously Presented): The process according to claim 1, further comprising:

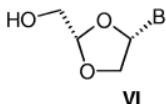
a) replacing the functional group at position C4 of the compound of formula I to produce a compound of formula V:



wherein B is purine or pyrimidine base or an analogue thereof;

b) removing the group R₂ of said compound of formula V; and

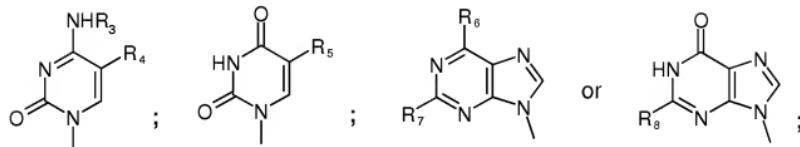
c) recovering a compound of formula VI:



or a pharmaceutically acceptable salt thereof.

8. (Previously Presented): The process according to claim 7, wherein

B is:



R₃ is H, C₁₋₆ alkyl, C₁₋₆ acyl, or CO-R₉;

R₉ is H or C₁₋₆ alkyl;

R₄ and R₅ are each independently H, C₁₋₆ alkyl, bromide, chloride, fluoride, iodide or CF₃; and

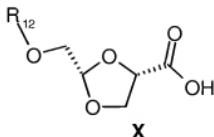
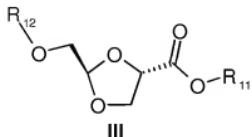
R₆, R₇ and R₈ are each independently H, bromide, chloride, fluoride, iodide, amino, hydroxyl, or C₃₋₆ cycloalkylamino.

9. (Cancelled):

10. (Original): A process according to claim 1, wherein R₁ is C₁₋₁₂ alkyl and R₂ is CO-C₆₋₁₂ aryl.

11. (Original): A process according to claim 1, wherein R₁ is methyl and R₂ is benzoyl.

12. (Currently Amended): A process for producing a compound of formula III and a compound of formula X:



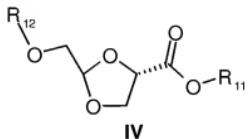
wherein

R_{11} is C_{1-12} alkyl, C_{2-12} alkenyl, C_{2-12} alkynyl, C_{6-12} aryl, C_{3-10} heterocycle, C_{6-12} aralkyl or C_{3-10} heteroaralkyl; and

R_{12} is $CO-C_{1-6}$ alkyl, $CO-C_{6-12}$ aryl, $CO-C_{1-6}$ alkoxy, $CO-C_{6-12}$ aryloxy, or $CO-C_{6-12}$ arylalkyl,

said process comprising:

a) subjecting a compound of formula IV:



to an enzymatic diastereomeric resolution in the presence of a suitable amount of an enzyme, wherein said enzyme is *Candida Antarctica "A" lipase*, *Candida Antarctica "B" lipase*, *Candida Lypolitica Lipase*, or *Rhizomucor Miehei Lipase*, wherein said resolution is conducted in the presence of a solvent selected from water, C_{1-12} alkanol, toluene, acetonitrile, tetrahydrofuran, dimethylformamide, dimethylsulfonamide, N-methylpyrrolidone, isoctane, t-butylmethyl ether, and mixtures thereof; and

b) recovering a compound of formula III and a compound of formula X.

13. (Original): The process according to claim 12, wherein R_{11} is C_{1-12} alkyl.

SHIRE-0518

14. (Previously Presented): The process according to claim 12, wherein R₁₂ is CO-C₁₋₆ alkyl.

15. (Original): The process according to claim 12, wherein R₁₂ is CO-C₆₋₁₂ aryl.

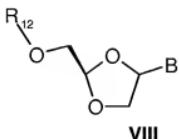
16. (Original): The process according to claim 12, wherein the enzyme is Candida Antarctica "A" lipase.

17. (Original): The process according to claim 12, wherein the enzyme is Candida Antarctica "B" lipase.

18. (Original): The process according to claim 12, wherein the enzyme is Candida Lypolitica Lipase.

19. (Original): The process according to claim 12, wherein the enzyme is Rhizomucor Miehei Lipase.

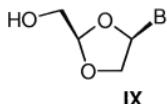
20. (Previously Presented): The process according to claim 12, further comprising:
a) replacing the functional group at position C4 of the compound of formula III to produce a compound of formula VIII:



wherein B is purine or pyrimidine base or an analogue thereof;

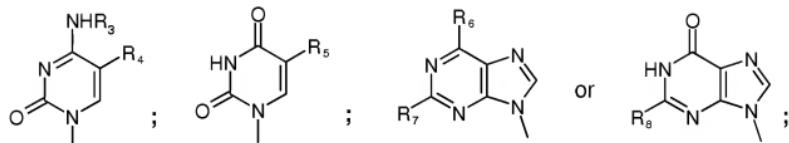
b) removing group R₁₂ of said compound of formula VIII;

c) recovering a compound of formula IX:



or a pharmaceutically acceptable salt thereof.

21. (Previously Presented): The process according to claim 20, wherein B is



R₃ is H, C₁₋₆ alkyl, C₁₋₆ acyl and CO-R₉;

R₉ is H or C₁₋₆ alkyl;

R₄ and R₅ are each independently H, C₁₋₆ alkyl, bromide, chloride, fluoride, iodide or CF₃; and

R₆, R₇ and R₈ are each independently H, bromide, chloride, fluoride, iodide, amino, hydroxyl or C₃₋₆ cycloalkylamino.

22. (Cancelled):

23. (Original): A process according to claim 12, wherein R₁₁ is C₁₋₁₂ alkyl and R₁₂ is CO-C₆₋₁₂ aryl.

24. (Original): A process according to claim 12, wherein R₁₁ is methyl and R₁₂ is benzoyl.

25. (Currently Amended): A process according to claim 1, wherein said process is

carried out at a pH of 6 to 8, at a temperature in the range of 5 to 50°C, ~~and in the presence of a solvent~~; and the concentration of enzyme with respect to the solvent is 1 mg/ml to 100 mg/ml.

26. (Currently Amended): A process according to claim 12 4, wherein said process is carried out at a pH of 6 to 8, at a temperature in the range of 5 to 50°C, ~~and in the presence of a solvent~~; and the concentration of enzyme with respect to the solvent is 1 mg/ml to 100 mg/ml.

27. (Previously Presented): A process according to claim 1, wherein the weight ratio of the amount of enzyme to the amount of the compound of formula II is 1% to 25%.

28. (Previously Presented): A process according to claim 1, wherein the weight ratio of the amount of enzyme to the amount of the compound of formula II is 5% to 10%.

29. (Previously Presented): A process according to claim 12, wherein the weight ratio of the amount of enzyme to the amount of the compound of formula IV is 1% to 25%.

30. (Previously Presented): A process according to claim 12, wherein the weight ratio of the amount of enzyme to the amount of the compound of formula IV is 5% to 10%.